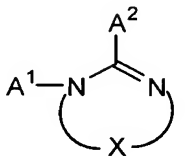
Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 – 34. (Canceled).

35. (Currently Amended) A cyclic amidine compound represented by ~~the~~ formula (I):



(I)

wherein:

A^1 and A^2 are each a hydrogen atom; ~~,~~ an optionally substituted alkyl group, excluding dichloronitromethyl, selected from the group consisting of methyl, ethyl, propyl, isopropyl, butyl, sec-butyl, and tert-butyl, wherein the alkyl group is optionally substituted by phenyl, 2-pyridyl, 3-pyridyl, 2-chloro-3-pyridiyl, 6-chloro-3-pyridyl, 6-fluoro-3-pyridyl, 5-bromo-3-pyridyl, 2,6-dichloro-3-pyridyl, 5,6-dichloro-3-pyridyl, 6-methyl-3-pyridyl, 6-ethoxy-3-pyridyl, 5-pyrimidyl, 3-quinolyl, 3-furanyl, tetrahydro-3-furanyl, 3-thienyl, or 3,5-dimethylisoxazolyl; ~~wherein alkyl group is substituted with optionally substituted aryl group, or optionally substituted heterocyclic group;~~ an optionally substituted aryl group selected from the group consisting of phenyl and

naphthyl, wherein the aryl group is optionally substituted by $C_1 - C_4$ alkyl group, hydroxyl group, amino group, or halogen atom; or an optionally substituted heterocyclic group selected from the group consisting of ~~unsubstituted or substituted~~ thiophene, ~~unsubstituted or substituted~~ furan, ~~unsubstituted or substituted~~ pyran, ~~unsubstituted or substituted~~ pyrrole, ~~unsubstituted or substituted~~ pyrazole, ~~pyridine substituted with one or more of C_1-C_4 lower alkyl group or halogen atom, unsubstituted or substituted~~ pyrimidine, ~~unsubstituted or substituted~~ pyrazine, ~~unsubstituted or substituted~~ pyridazine, ~~unsubstituted or substituted~~ imidazole, ~~unsubstituted or substituted oxazole, unsubstituted or substituted~~ isoxazole, ~~unsubstituted or substituted~~ isothiazole, ~~unsubstituted or substituted~~ quinoline, ~~unsubstituted or substituted~~ isoquinoline, ~~unsubstituted or substituted~~ indole, ~~unsubstituted or substituted~~ azaindole, and ~~unsubstituted or substituted~~ tetrahydropyrimidine, wherein the heterocyclic group is optionally substituted by $C_1 - C_4$ alkyl group or halogen atom; and

X is $-C(R^7, R^8)-C(R^9, R^{10})-C(R^{11}, R^{12})-$ wherein R^7, R^8, R^9, R^{10}, R^{11} and R^{12} are each a hydrogen atom; a halogen atom; an optionally substituted alkyl group selected from the group consisting of methyl, ethyl, propyl, isopropyl, butyl, sec-butyl, and tert-butyl, wherein the alkyl group is optionally substituted by phenyl, 2-pyridyl, 3-pyridyl, 2-chloro-3-pyridiyl, 6-chloro-3-pyridyl, 6-fluoro-3-pyridyl, 5-bromo-3-pyridyl, 2,6-dichloro-3-pyridyl, 5,6-dichloro-3-pyridyl, 6-methyl-3-pyridyl, 6-ethoxy-3-pyridyl, 5-pyrimidyl, 3-quinolyl, 3-furanyl, tetrahydro-3-furanyl, 3-thienyl, or 3,5-dimethylisoxazolyl;

~~optionally substituted aryl group~~ an unsubstituted or substituted phenyl group wherein the phenyl group is optionally substituted by halogen atom or $C_1 - C_4$ alkyl group; or an optionally substituted 5 or 6 membered heterocyclic group containing 1 to 3 hetero atoms selected from the group consisting of thiophene, furan, pyran, pyrrole, pyrazole, pyrimidine, pyrazine, pyrizadine, imidazole, isoxazole, isothiazole, qunioline, isoquinoline, indole, azaindole, and tetrahydropyrimidine, wherein the heterocyclic group is optionally substituted by $C_1 - C_4$ alkyl group or halogen atom;

or a pharmaceutically acceptable salt thereof.

36. (Currently Amended) The following compounds represented by the formula (I) of claim 35;

~~2- (6-chloro-3-pyridyl) – 1, 4, 5, 6 tetrahydropyrimidine;~~

~~2- (6-chloro-3-pyridyl) – 1 methyl-1, 4, 5, 6-tetrahydropyrimidine;~~

2- (6-chloro-3-pyridyl)methyl-1, 4, 5, 6-tetrahydropyrimidine;

2- (6-chloro-3-pyridyl)methyl-1-methyl-1, 4, 5, 6-tetrahydropyrimidine;

2- (tetrahydrofuran-3-yl) – 1, 4, 5, 6-tetrahydropyrimidine;

2- (tetrahydrofuran-3-yl)methyl-1, 4, 5, 6-tetrahydropyrimidine;

2- (5-bromo-3-pyridyl)methyl-1, 4, 5, 6-tetrahydropyrimidine;

2- (3-pyridyl)methyl-1, 4, 5, 6-tetrahydropyrimidine;

2- (3-aminophenyl) – 1, 4, 5, 6-tetrahydropyrimidine;

2- (3-quinolyl)methyl-1, 4, 5, 6-tetrahydropyrimidine;

2- (2-chloro-5-thiazolyl)-1, 4, 5, 6-tetrahydropyrimidine;

2- (3-quinolyl)-1, 4, 5, 6-tetrahydropyrimidine;

1- (6-chloro-3-pyridyl)methyl-1, 4, 5, 6-tetrahydropyrimidine;

2- (3, 5-dimethyl-4-isoxazolyl)methyl-1, 4, 5, 6-tetrahydropyrimidine;

2- (3-thienyl)methyl-1, 4, 5, 6-tetrahydropyrimidine;

1, 2-bis [(6-chloro-3-pyridyl) methyl] – 1, 4, 5, 6-tetrahydropyrimidine;

2- (5, 6-dichloro-3-pyridyl) methyl-1, 4, 5, 6-tetrahydropyrimidine;

2- (6-chloro-3-pyridyl)methyl-5-phenyl-1, 4, 5, 6-tetrahydropyrimidine;

2- (4-pyridyl)methyl-1, 4, 5, 6-tetrahydropyrimidine;

2- (2-chloro-3-pyridyl)methyl-1, 4, 5, 6-tetrahydropyrimidine;

2- (2, 6-dichloro-3-pyridyl)methyl-1, 4, 5, 6-tetrahydropyrimidine;

2- [2-(6-chloro-3-pyridyl)ethyl]-1, 4, 5, 6-tetrahydropyrimidine;

2- (6-methyl-3-pyridyl)methyl-1, 4, 5, 6-tetrahydropyrimidine;

2- (6-ethoxy-3-pyridyl)methyl-1, 4, 5, 6-tetrahydropyrimidine;

2- (6-fluoro-3-pyridyl)methyl-1, 4, 5, 6-tetrahydropyrimidine;

2- (6-chloro-3-pyridyl)methyl-5, 5-dimethyl-1, 4, 5, 6-tetrahydropyrimidine;

2- (2-pyridyl)methyl-1, 4, 5, 6-tetrahydropyrimidine;

1- (5, 6-dichloro-3-pyridyl)methyl-1, 4, 5, 6-tetrahydropyrimidine;

2- (6-chloro-3-pyridyl)methyl-4-methyl-1, 4, 5, 6-tetrahydropyrimidine;

1-[2-(6-chloro-3-pyridyl)ethyl]-1, 4, 5, 6-tetrahydropyrimidine;

1- (3-pyridazinyl)methyl-1, 4, 5, 6-tetrahydropyrimidine;

1- (6-methyl-3-pyridyl)methyl-1, 4, 5, 6-tetrahydropyrimidine;

1- (3-pyridyl)methyl-1, 4, 5, 6-tetrahydropyrimidine;

~~3-(6-chloro-3-pyridyl)methyl-1, 4, 5, 6-tetrahydro-1, 2, 4-triazine;~~

2- [1-(6-chloro-3-pyridyl)ethyl]-1, 4, 5, 6-tetrahydropyrimidine;

1- (2-chloro-5-thiazolyl)methyl-1, 4, 5, 6-tetrahydropyrimidine;

2- (2-chloro-5-thiazolyl)methyl-1, 4, 5, 6-tetrahydropyrimidine;

2- (5-pyrimidyl)methyl-1, 4, 5, 6-tetrahydropyrimidine;

2- (5-methyl-3-pyridyl)methyl-1, 4, 5, 6-tetrahydropyrimidine; and a pharmaceutically acceptable salt thereof.

37.-40. (Canceled).

41. (Previously Presented) A pharmaceutical composition comprising the compound or pharmaceutically acceptable salt thereof claimed in claim 35 or 36, as the active ingredient.

42. (Previously Presented) A method of activating $\alpha 4\beta 2$ nicotinic acetylcholine receptors in a patient comprising administering an effective amount of a compound as claimed in claim 35 or 36 to said patient.

43. (Previously Presented) A method of treating cerebral circulation diseases which comprises administering an effective amount of a composition claimed in claim 41.

44. (Previously Presented) A method of treating neurodegenerative diseases, dementia, motor ataxia, and neuropathy and mental disease which comprises administering an effective amount of a composition claimed in claim 41.

45. (Previously Presented) A method according to claim 44, wherein said neurodegenerative disease is Alzheimer's disease or Parkinson's disease, said dementia is cerebrovascular dementia, said motor ataxia is Tourette's syndrome, and said neuropathy and mental disease is neurosis during the chronic cerebral infarction stage, anxiety or schizophrenia.

46. (Previously Presented) A composition according to claim 41, further comprising a pharmaceutically acceptable carrier or excipient for oral or parenteral administration.

47. (Previously Presented) A composition according to claim 46, wherein said carrier or excipient is selected from the group consisting of polyvinyl pyrrolidone, gum Arabic, gelatin, sorbitol, cyclodextrin, magnesium stearate, talc, polyethylene glycol, polyvinyl alcohol, silica, lactose, crystalline cellulose, sugar, starch, calcium phosphate, vegetable oil, carboxymethycellulose, hydroxyl propylcellulose, sodium lauryl sulfate, water, ethanol, mannitol, syrup and mixtures thereof.

48. (Previously Presented) A composition according to claim 47 in unit dosage form.

49. (Previously Presented) A composition according to claim 46, wherein said carrier is an isotonic solution.

50. (Currently Amended) A ~~compound~~ method according to claim 42, comprising administering said compound orally.

51. (Previously Presented) A method according to claim 50, wherein said effective amount is about 0.001-1,000 mg/kg body weight.

52. (Previously Presented) A method according to claim 51, wherein said effective amount is 0.01-100 mg/kg body weight.

53. (Previously Presented) A method according to claim 52, wherein said effective amount is 0.1-10 mg/kg body weight.

54. (Previously Presented) A method according to claim 42, comprising administering said compound parenterally.

55. (Previously Presented) A method according to claim 54, wherein said effective amount is about 0.001-1,000 mg/kg body weight.

56. (Previously Presented) A method according to claim 55, wherein said effective amount is 0.01-100 mg/kg body weight.

57. (Previously Presented) A method according to claim 56, wherein said effective amount is 0.1-10 mg/kg body weight.

58. (Currently Amended) A compound according to claim 35, wherein the pharmaceutically acceptable salt is a salt of hydrochloric acid, hydrobromic acid, sulfuric acid, phosphoric acid, fumaric acid, maleic acid, ocxalic acid, citric acid, tartaric acid, malic acid, lactic acid, succinic acid, benzoic acid, methanesulfonic acid, ~~and~~ or p-toluenesulfonic acid.